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| 10/036,691      | 12/21/2001  | Fredrick Taylor      | WRS2                | 4955             |

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11/19/2003

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| EXAMINER |
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MAKI, STEVEN D

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| ART UNIT | PAPER NUMBER |
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1733

DATE MAILED: 11/19/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

C206

**Office Action Summary**

Application No.

10/036,691

Applicant(s)

TAYLOR, FREDRICK

Examiner

Steven D. Maki

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4                      6) ☐ Other:

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- 1) The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 2) Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1 and 8, the scope and meaning of "integrating the tread cap with the tread region of the tire concurrent with the manufacture of the tire" is ambiguous since, for example, (a) the tread region is defined by the tread cap, (b) it is unclear which step(s) such as vulcanization are required by "the manufacture of the tire" and (c) it is unclear if step (a) comprises step (c) or is a separate step from step (c). As a related matter, it is unclear what additional limitation is required by claims 6 and 11.

Claim 18 does not end in a period.

- 3) Claims 6 and 11 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

The subject matter in claims 6 and 11 is inherently required by claims 1 and 8 respectively.

- 4) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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5) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Japan '104

6) **Claims 1, 6, 7 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Japan '104 (JP 64-74104).**

Japan '104, directed to a non-marking pneumatic tire, discloses making a tire by superimposing a tread band (tread cap) 1 on a tire casing (green tire) 2 with a cushion rubber 3 therebetween and vulcanization molding the tire. The nonmarking tread comprises 100 parts nonstaining rubber selected from natural and synthetic rubbers, 30-70 parts silica, 0-1 parts carbon black, nonstaining additives such as vulcanization agent, filler, colorant etc. The tire can be used in a warehouse, factory, etc. without causing staining of the floor. See abstracts and figure 1.

Claim 1 (method) and claim 12 (tire) are anticipated by Japan '104's method of making a nonmarking tire and the tire made thereby respectively.

As to claim 6, note Japan '104's method of making a nonmarking tire.

As to claim 7, Japan '104 teaches including colorant in the tread.

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Great Britain '870

7) **Claims 1, 3, 4, 6, 7, 12, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Great Britain '870 (GB 2239870) in view of Japan '104 (JP 64-74104).**

Great Britain '870 discloses a rubber composition comprising an elastomeric material such as natural rubber, SBR or polybutadiene, a filler such as carbon black and a processing aid in the form paraffinic oil, and liquid polyisoprene. A vulcanizate made from the composition does not cause discolorization. See page 2 last full paragraph. The rubber composition can be used in a tire so that the tire does not stain the floor. See page 2 first full paragraph and page 1 last full paragraph.

As to claims 1, 6 and 12, it would have been obvious to one of ordinary skill in the art to apply a tread comprising Great Britain '870's non-discoloring composition to green tire and vulcanize the tire so as to form a non-marking tire since (a) Great Britain '870 suggests using the composition in a tire and (b) Japan '104, also directed to nondiscoloring compositions, teaches applying a tread comprising a nonmarking composition to green tire and then vulcanizing the tire to form a nonmarking tire.

As to claims 3 and 14, Great Britain '870 discloses including zinc oxide in the composition. See mixture A on page 3.

As to claims 4 and 15, Great Britain '870 discloses using antioxidant in the composition. See mixture A on page 3.

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As to claim 7, it would have been obvious to color Great Britain '870's composition so that the tread is a colored and nonmarking tread since Japan '104 suggests that a colorant may be included in a nonmarking composition for a tread.

**8) Claims 2 and 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Great Britain '870 (GB 2239870) in view of Japan '104 (JP 64-74104) as applied above and further in view of Sandstrom et al (US 5216066).**

As to claims 2 and 13, it would have been obvious to one of ordinary skill in the art to include "ethylene propylene rubber" in addition to natural rubber and synthetic rubber in the nondiscoloring composition of Great Britain '870 since (a) Great Britain '870 teaches that the elastomer may contain natural rubber and polybutadiene and (b) Sandstrom et al teaches including a sulfonamide modified EPDM terpolymer in addition to other rubbers such as natural rubber and polybutadiene in a tire tread composition to improve abrasion resistance, ozone resistance and hysteresis and to reduce or eliminate the amount of amine antizonant and thereby produce a nonstaining tire tread. In the claim, "ethylene propylene rubber" reads on a sulfonamide modified EPDM terpolymer as disclosed by Sandstrom et al.

**8) Claims 8-11 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Great Britain '870 (GB 2239870) in view of Japan '104 (JP 64-74104) as applied above and further in view of Sandstrom et al (US 5216066) and Europe '137 (EP 708137).**

As to claims 8 and 17, it would have been obvious to one of ordinary skill in the art to include 20-50 parts "ethylene propylene rubber" in addition to 30-70 parts natural

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rubber and synthetic rubber in the nondiscoloring composition of Great Britain '870 since (a) Great Britain '870 teaches that the elastomer may contain natural rubber and polybutadiene and (b) Sandstrom et al teaches including a sulfonamide modified EPDM terpolymer in addition to other rubbers such as natural rubber and polybutadiene in a tire tread composition to improve abrasion resistance, ozone resistance and hysteresis and to reduce or eliminate the amount of amine antiozonant and thereby produce a nonstaining tire tread. In the claim, "ethylene propylene rubber" reads on a sulfonamide modified EPDM terpolymer as disclosed by Sandstrom et al. Furthermore, the limitation of 11-60 parts carbon black and 11-60 parts white carbon would have been obvious and could have been determined without undue experimentation in view of (a) Great Britain '870's teaching to use one or more fillers such as carbon black in the nondiscoloring composition and (b) Europe '137's teaching to use silica and carbon black in a 1:1 ratio in a nondiscoloring composition for a tire tread.

As to claims 9 and 18, it would have been obvious to include the claimed zinc oxide, tackifier, microcrystallized wax, antioxidant and antiozonant in the claimed amounts in the composition of Great Britain '870 since (a) Great Britain '870 teaches that the composition may include zinc oxide, antioxidant, wax (mixture A page 3); microcrystallized wax being taken as well known / conventional type of wax and (b) Sandstrom et al teaches that a tread composition may also include tackifiers and antiozonants (col. 6 lines 49-61).

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As to claim 10, it would have been obvious to color Great Britain '870's composition so that the tread is a colored and nonmarking tread since Japan '104 suggests that a colorant may be included in a nonmarking composition for a tread.

As to claim 11, note Japan '104's teaching to apply a tread comprising a nonmarking composition to green tire and then vulcanizing the tire to form a nonmarking tire.

As to claim 19, it would have been obvious to provide Great Britain '870's tire as a bias tire since a bias tire is taken as a well known / conventional construction for a tire.

As to claim 20, it would have been obvious to color Great Britain '870's composition so that the tread is a colored and nonmarking tread since Japan '104 suggests that a colorant may be included in a nonmarking composition for a tread.

#### **Allowable Subject Matter**

**8) Claims 5 and 16 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.**

The prior art of record fails to suggest modifying the composition of Great Britain '870 or Japan '104 such that the resulting tread composition consists of each of the specific claimed ingredients.

#### **Remarks**

9) The remaining references are of interest.

10) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is 703-308-



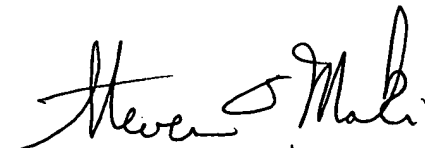
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2068 until Dec. 18, 2003 and (571) 272-1221 after Dec. 18, 2003. The examiner can normally be reached on Mon. - Fri. 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (703) 308-3853. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Steven D. Maki  
November 16, 2003

  
STEVEN D. MAKI 11-16-03  
PRIMARY EXAMINER  
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